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# The Effects of Instruction Based on Cognitive Linguistic Approach on Korean EFL Students' Learning of English Phrasal Verbs

인지언어학적 관점 기반 교수법이 한국 영어 학습자들의 구동사 학습에 미치는 영향

2018년 2월

서울대학교 대학원
외국어교육과 영어전공
고 수 현

# The Effects of Instruction Based on Cognitive Linguistic Approach on Korean EFL Students' Learning of English Phrasal Verbs

by
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# The Effects of Instruction Based on Cognitive Linguistic Approach on Korean EFL Students' Learning of English Phrasal Verbs

APPROVED BY THESIS COMMITTEE:

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# ABSTRACT

This study explored the effects of instruction based on cognitive linguistic approach on Korean EFL middle school students' learning of phrasal verbs in terms of two aspects: recollecting learned phrasal verbs and deducing the meanings of new phrasal verbs, and examined if cognitive linguistic approach had an effect on test takers' performance according to their proficiency level.

Sixty two third graders in public middle school in Seoul, Korea, participated in the experiment and they were divided into three groups: concept-based instruction group, verbalization-based instruction group, and memorization-based instruction group. The first two groups were instructed based on cognitive linguistic approach while the only difference between them was the presence of SCOBA (Schema of a Complete Orienting Basis of an Action). The last group was instructed based on memorization and practice. The results were analyzed based on a pre-test, an immediate post-test, and a delayed post-test.

The results showed that there is no significant difference between the respective instruction groups with regard to remembering the learned phrasal verbs even though they performed differently over time. Also, when it comes to learning new phrasal verbs, cognitive linguistic approach groups

outperformed the other group both in the immediate post-test and the delayed post-test. However, the performance of the three groups differed statistically only in the immediate post-test while there was no significant difference in the delayed post-test. Furthermore, greater difference among instructional groups was found in the particular particle usage in the immediate post-test. Lastly, the effect of instructions based on cognitive linguistic approach varied depending on the proficiency level. Advanced learners in instructional groups based on cognitive linguistics performed statistically better than the other students in terms of learned phrasal verbs, which was not the case for the new items. Intermediate learners did not show any difference between the three instruction types in either recollecting instructed items or understanding uninstructed items. On the other hand, low proficient learners showed no significant difference among the instructional groups in terms of learned items, whereas the students in cognitive linguistics-based groups outperformed the other students with respect to new phrasal verbs and it was statistically significant.

These findings suggest the possibility of implementing instruction based on cognitive linguistic approach. To be more specific, in spite of the mixed result of the effect of cognitive linguistic approach, it is still applicable in Korean EFL context as shown in the successful transfer of the conceptual understanding to new phrasal verbs in the immediate post-test. In addition, both advanced learners and beginners benefit from cognitive linguistics-based

approach when recollecting learned phrasal verbs and deducing meanings of unknown items, respectively.

When implementing instruction based on cognitive linguistic approach, there are several things to take into account for the successful use of this approach. Linguistic and cognitive ability of the target students should be considered so that the materials are not too difficult to understand and internalize. Moreover, the SCOBA for the target students should be adjusted so that it is not too abstract or over-burdening for them.

Key Words: cognitive linguistic approach, phrasal verbs, Korean EFL learners, SCOBA, linguistic and cognitive ability

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# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# CHAPTER 1.

# INTRODUCTION

This chapter introduces the research by presenting the motivation of the study and the organization of the thesis. Section 1.1 discusses the background and the purpose of the study. Section 1.2 presents the research questions, and the overall organization of the thesis is outlined in Section 1.3.

## 1.1. Purpose of the Study

The study of vocabulary instruction has become an important aspect of language learning because increasing vocabulary size is crucial in fostering all four language skills (Staehr, 2008). In particular, vocabulary knowledge has been found to predict different levels of oral proficiency and it has been reported to be highly correlated to scores on reading and listening comprehension (Iwashita, Brown, McNamara & O'Hagan, 2008; Qian, 1999; Staehr, 2009). Besides, according to Astika (1993), vocabulary was found to

be the strongest predictor for the total score of the ESL students' writings assessed based on the ESL Composition Scale as it accounted for 84% of the variance. In other words, vocabulary has been considered an important element to teach in language learning along with four language skills.

However, most EFL learners have difficulties in enlarging vocabulary size over a certain level because many words in the target language are polysemous and figurative (Boers, 2013). Above all, "[p]hrasal verbs are notoriously difficult for EFL learners" (Gilquin, 2015, p. 74) because they look idiomatic and are "impossible to understand on the basis of their constituting elements, verb and particle" (Rudzka-Ostyn, 2003, p. 3).

In particular, Korean learners of English might have more difficulties in learning phrasal verbs because of the EFL learning environment. As phrasal verbs are believed to be more pervasive in spoken language than in written language, the amount of input and the opportunity to use them in daily life might be a crucial factor in recognizing and acquiring phrasal verbs. Kweon (2006) analyzed the tendency of avoidance of phrasal verbs by Korean EFL learners and found out that even advanced learners used them differently compared to native speakers. This was not applicable to Chinese ESL learners who were exposed to L2 input in everyday life unlike Korean EFL learners. In other words, with regard to learning phrasal verbs, learning

environment might play an important role.

Besides, the Korean young learners of English who have studied English only from their text books are not likely to be exposed to phrasal verbs as much as they need to acquire them. Without any other resources for learning English than text books, it seems that learners could hardly reach a level of proficiency at which they can understand and use phrasal verbs. In this respect, phrasal verbs could be the major difficulties for young Korean EFL learners to overcome.

Despite the difficulties in learning phrasal verbs in the classroom, it is important to teach them because they are one of the perennial obstacles that cause confusion and frustration in learning English (Kurtyka, 2001). Moreover, phrasal verbs are frequently used in both spoken and written language (Crutchley, 2007), which is why this should not be overlooked in order to help students improve their English proficiency.

Cognitive Linguistics can provide a theoretical approach to help foreign language learners overcome difficulties in learning phrasal verbs. In this framework, many researchers suggested different instruction methods for teaching vocabulary using conceptual metaphors (Beréndi, Csábi & Kövecses, 2008; Boers, 2000; Lee, 2012). Based on Conceptual Metaphor Theory, researchers argue that metaphoric thought makes us understand and

experience invisible concepts in our lives (Boers, 2013). In this respect, researchers postulate that polysemy and figurative multiword vocabulary items are also motivated by metaphors, which means they are systematic and concept-based rather than arbitrary and inconsistent (Csábi, 2004). This particular method of teaching vocabulary is believed to enable foreign language learners to retain the meanings of the learned items in an organized manner and make use of them in a more productive way simultaneously without having to memorize a list of every independent word. It can be also applied to teaching phrasal verbs. In other words, foreign language learners might be able to not only recollect the meanings of learned phrasal verbs but also deduce the meanings of the new language unit by applying cognitive linguistics-based approach and extending their understanding to the new combination of a verb and a particle, and this will be helpful in learning phrasal verbs in the long term.

In spite of the presumed effectiveness of this approach, previous literature on the conceptual metaphor theory has two limitations. Most of the cognitive linguistics-inspired proposals for vocabulary instruction have been aimed at advanced adult learners (Piriz, 2008). In addition, many experiments have been conducted to participants whose first language is similar to the target language (Beréndi et al., 2008). In other words, previous research in

this field has neglected to consider young learners whose first language is greatly different from the target language.

The scope of using cognitive linguistic approach to teaching vocabulary can be extended in this study as the target learners are middle school students whose first language could be significantly different from the target language, English. In this line of thought, the aim of the present paper is to give insight to teaching English phrasal verbs to secondary school students in Korea based on cognitive linguistic approach. To be more specific, particles comprising phrasal verbs will be analyzed in terms of their metaphorical properties and presented to students. The study will adopt Gal'perin's (1992) Concept-Based Instruction which is a systematic approach to combining metaphorical analysis with teaching. More specific research questions are as follows.

## 1.2. Research Questions

The present study investigates the effects of instruction based on cognitive linguistic approach on Korean EFL middle school students' learning of phrasal verbs in terms of two aspects: recollecting instructed phrasal verbs and guessing the meanings of unknown ones. In addition, it

examines if there is any effect of instruction based on cognitive linguistic approach on the participants' performance according to the different level of proficiency. The following three research questions are addressed in this study.

1) To what extent does instruction based on cognitive linguistic approach help Korean middle school students to recall English phrasal verbs?
2) To what extent does instruction based on cognitive linguistic approach help Korean middle school students to deduce the meaning of new English phrasal verbs?
3) To what extent does learners' English proficiency level influence learning of phrasal verbs through instruction based on cognitive linguistic approach?

## 1.3. Organization of the Thesis

The present thesis consists of six chapters. Chapter 1 introduces the purpose of the study and presents the research questions. Chapter 2 presents the literature review on effects of instruction based on cognitive linguistic approach on EFL vocabulary learning. In Chapter 3, the method of the study

is described in terms of the participants, the instruments, the procedure, and the data analysis. Chapter 4 presents the results and discusses the research findings. Finally, Chapter 5 concludes the thesis with the summary of the major findings, the implications of the study, and the suggestions for the future research.

# CHAPTER 2.

# LITERATURE REVIEW

This chapter provides the theoretical background and previous literature on instruction based on cognitive linguistic approach. Section 2.1 presents the theoretical background of cognitive linguistics and conceptual metaphors. Section 2.2 addresses Concept-Based Instruction developed by Gal'perin. Section 2.3. reviews previous studies on cognitive linguistics-inspired instruction for vocabulary teaching and language learning.

## 2.1. Cognitive Linguistic Approach and Conceptual Metaphors

Cognitive linguistics emerged against generative linguistics, which treated language as domain-specific component independent from general cognitive abilities (Evans, 2012; Langacker, 1987). Rather, cognitive linguistics suggests that language is acquired based on its usage and general cognitive abilities are closely related to language acquisition. Also, cognitive

linguistics "studies patterns of conceptualization based on the assumption that language reflects certain fundamental properties of human mind and emphasizes the role of meaning rather that of form" (Lee, 2012, p. 46).

Based on this approach, language is "considered to be motivated" (Boers, 2013, p. 211). In particular, language reflects the way we perceive the world by adopting a certain language item consistent with "habitual human perceptual and cognitive experience" (Boers, 2013, p. 211). For example, Boers (2013) stated that when we compare two sentences *Shall I give you a foot with that?* and *Shall I give you a hand with that?*, the latter is understood as conventionalized expression because of our shared knowledge about the world. To be more specific, we are likely to use our hands to manipulate things instead of using feet. This exemplifies the core idea of cognitive linguistic approach, which is that motivation plays a role in everyday language.

The motivating elements in language stem from Lakoff and Johnson's (1980) conceptual metaphor, which states that human concept as well as language is metaphorical in nature.

> The most important claim we have made so far is that metaphor is not just a matter of language, that is, of mere words. We shall argue that, on

> the contrary, human thought processes are largely metaphorical. This is what we mean when we say that the human conceptual system is metaphorically structured and defined (Lakoff & Johnson, 1980, p. 6).

As for the example of this aspect, Lakoff and Johnson exemplified the metaphor of ARGUMENT IS WAR by listing sentences such as "Your claims are indefensible." "He attacked every weak point in my argument." and "I demolished his argument." (1980). It means we perceive 'argument' through 'war' by exploiting war-related terms to describe the concept about argument. This shows that metaphor is everywhere in our daily lives and we understand one concept through other kinds of ideas.

Previous studies in cognitive linguistics have focused on these conceptual metaphors and the "possibility of incorporating the notion of conceptual metaphor into foreign language learning and teaching" (Lee, 2012, p. 48). In this line of thought, vocabulary teaching is regarded as one of the most appropriate domains to apply this approach since it can facilitate foreign language learning by providing useful frames based on conceptualization for EFL learners to enlarge vocabulary size.

## 2.2. Gal'perin's Approach and Concept-Based Instruction

Inspired by sociocultural theory founded by Vygotsky, Gal'perin developed a theoretical framework for teaching, learning, and cognitive development (Gal'perin, 1969, 1989, 1992). In particular, Gal'perin devised a Concept-Based Instruction (CBI), also known as Systematic-Theoretical Instruction, based on three key concepts: internalization, materialization and verbalization (Gal'perin, 1992). Gal'perin's approach to learning is closely related to cognitive linguistics in that both approaches emphasize the conceptualization (as cited in Arievitch & Haenen, 2005).

According to Gal'perin, "the formation of mental acts passes through a series of stages" (Gal'perin, 1969, p.249).

> We distinguish five levels of an act: (1) familiarization with the task and its conditions; (2) an act based on material objects, or their material representations or signs; (3) an act based on audible speech without direct support from objects; (4) an act involving external speech to oneself (with output only of the result of each operation); and (5) an act using internal speech. These levels indicate the basic transformation of an act as it

becomes mental (Gal'perin, 1969, p. 250).

His idea on mental process was examined through experimental studies (Gal'perin, 1989; Talyzina, 1981) and further developed by his followers. Lee (2012) specified Gal'perin's stepwise formation of mental action as below.

1. Orienting stage: construction of the orienting basis of the action
2. Material(ized) stage: mastering the action using material or materialized objects
3. Stage of overt speech: mastering the action at the level of overt speech
4. Stage of covert speech: mastering the action at the level of 'speaking to oneself' (covert speech)
5. Mental stage: transferring the action to the mental level

On the "Orienting stage", the teacher provides an orienting chart that can help learners comprehend the core idea of what they are learning. On the "Material(ized) stage", learners practice and carry out a task with the help of materials such as actual objects, diagrams or graphs. On the "Stage of overt speech", learners are asked to talk about what they are working on with peers,

which is called verbalization. This process of verbalization becomes covert on the "Stage of covert speech", as learners internalize the concept. At the end, the target concept is automatically employed by learners without conscious efforts on the "Mental stage".

For the "Orienting stage", Gal'perin (1992) made use of SCOBA (Schema of a Complete Orienting Basis of an Action), which "provides a cognitive map that serves to orient learners whenever they engage in activities relative to the concept" (as cited in Lantolf & Poehner, 2014, p. 64). This SCOBA is closely related to Lakoff and Johnson's (1980) conceptual metaphor because it is developed as a result of analysis on metaphorical properties of the target language. According to Gal'perin, the teacher can lead learners in a more effective way by using SCOBAs. In this respect, it is crucial to develop proper SCOBAs for teaching based on Gal'perin's CBI approach.

## 2.3. Previous studies on Cognitive Linguistics-inspired Vocabulary Instruction

The following two sections review studies on cognitive linguistics (CL)-inspired instruction for teaching different language units, and the last

section deals with a study based on CBI. In particular, Section 2.3.1 and Section 2.3.2 presents studies on teaching figurative expressions and multiword units, respectively. Section 2.3.3 illustrates a study on teaching phrasal verbs based on CBI.

### 2.3.1. Using conceptual metaphors in teaching L2 figurative expressions

Boers (2000) showed the efficacy of using metaphors in retention of figurative expressions in the target language in two experiments. In the first experiment with 118 Belgium ESL pupils, two groups of students were asked to read the text and each group was given a vocabulary list. The only difference between the two groups was the way of organizing the vocabulary. The experimental group received vocabulary notes organized along with various metaphoric themes such as THE BODY IS A CONTAINER FOR EMOTIONS or ANGER IS A HOT FLUID IN A CONTAINER. However, the control group received the vocabulary input grouped under different themes such as "to describe angry personalities". After 10 minutes to look over the vocabulary, they were guided to engage in class discussion about anger and conflicts. Then, they were given a cloze test which asked them to

reproduce the text they read with the novel vocabulary. The result showed that the experimental group scored higher than the control group ($p < .05$). It means raising metaphoric awareness was effective for remembering the figurative expressions in the domains of emotion.

The second experiment was designed to measure the effect of metaphor awareness on novel vocabulary retention by investigating the participants' productive skills while the first experiment measured their receptive skills. The experiment was conducted on 73 university students of business and economics in France, whose English proficiency is at intermediate level, and they were given a list of vocabulary to describe upward and downward trends in economics. The experimental group was guided to pay attention to the source domains of the given expressions such as 'rockets' or 'airplanes' for 'soar', 'skyrocket' and 'crash'. On the contrary, the control group was given the notes without the imagery headings. After 10 minutes of going over the word list they were given a couple of graphs describing unemployment figures and economic trends and instructed to write an essay to explain for 30 minutes using various up-down lexical items. Their writings were investigated in terms of the number of the targeted expressions. The results indicated that the experimental group used more targeted expressions than the control group ($p < .001$). It means the group that was

encouraged to relate the novel figurative expressions to the source domains could better reproduce the target words compared to the other group. This experiment also supports the idea that raising metaphoric awareness can facilitate vocabulary retention in more active usage.

The experiments above indicate that organizing figurative expressions under metaphoric themes helps learners remember and retrieve the target items. Although the experiments were conducted in a small scale and were limited to the participants whose linguistic background is similar to that of the target language, their results are meaningful enough to suggest the pedagogical implication for using conceptual metaphors in vocabulary teaching.

### 2.3.2. CL-inspired instruction for teaching L2 multiword units

Recent studies on teaching vocabulary in the cognitive linguistics framework have focused on multiword items such as idioms and phrasal verbs. The next subsections will focus on each of these two areas in this field and suggest the possibility of developing vocabulary instructions based on conceptual metaphors.

### *2.3.2.1. Teaching polysemy through conceptual metaphors*

Csábi (2004) conducted experiments with 26 Hungarian ESL learners in secondary school to investigate the effects of using conceptual metaphors in teaching polysemous words *hold* and *keep*. To be more specific, the procedure was designed to see the effects of explaining motivations behind the various senses of the target words, *hold* and *keep,* and idioms including these words. The experimental group was presented with the most important motivating factors of each target word using conceptual metaphors behind them, while the control group was given a list of phrasal verbs and idioms including the two words along with their first language equivalents. Then, both groups were given sentences with blanks to fill in. The result indicated that the performance on phrasal verbs of the experimental group was better than that of the control group whereas their performances regarding idioms did not show any statistically meaningful difference.

This experiment shows the possibility of making use of metaphoric concepts behind polysemous words. In spite of the failure of using metaphors to retrieve related idioms, the result provides insight to applying cognitive linguistic approach to teaching vocabulary because it fosters semantic extension, which enables foreign language learners to use lexical items more

productively (Píriz, 2008).

### *2.3.2.2. Teaching idioms through conceptual metaphors*

Beréndi et al. (2008) investigated the possibility that raising students' awareness of conceptual metaphors behind idioms can foster their comprehension and retention. Participants were 43 first-year English major college students in Hungary. Both control and experimental group were presented the same material with one difference: the way of organizing idioms to be learned. The experimental group was given conceptual metaphors behind the idioms while the control group was not. The result showed that the experimental group outperformed the control group considering the mean score in both immediate post-test and delayed post-test.

Even though the result of the experiment supports the positive effect of enhancing metaphor awareness on idiom learning in L2, it has to be considered why the target idioms were selected. Beréndi et al. (2008) acknowledged that they decided to focus on idioms related to emotions such as ANGER IS FIRE, ANGER IS A HOT FLUID IN A CONTAINER because Hungarian and English share major conceptual metaphors of emotion. It implies that the cultural and linguistic differences might have an influence

on the shared conceptual metaphors between L1 and the target language. In other words, when there is little shared conceptual metaphors between L1 and the target language, the effects of cognitive linguistic can be different. From the limited literature that exists on the effects of cognitive linguistic approach to teaching vocabulary, it appears necessary to explore whether or not this approach is also effective in Korean EFL context.

#### *2.3.2.3. Teaching phrasal verbs through conceptual metaphors*

Boers (2000) showed the effect of using conceptual metaphors to teaching multiword vocabulary items focusing on orientational metaphors of prepositions or particles. The participants were 74 university students and they were assigned into two groups. The experimental group was given multiword vocabulary items listed under the headings of tfheir underlying orientational metaphors such as MORE IS UP; LESS IS DOWN or ACTIVE IS UP; INACTIVE IS DOWN, while the control group was given a list of multiword vocabulary items in an alphabetical order. After 10 minutes of studying the set of words, they were given a reading text with the blanks to fill in. They were to fill in the blanks with the vocabulary items provided at the bottom. The word items to fill in included the new vocabulary items as

well as the learned items to check the possibility of transfer of using spatial imagery. The result showed that the experimental group was more likely to retrieve the multiword vocabulary they learned through orientational metaphor. On the contrary, the successful transfer of the strategy was not supported by the result, which means that learners even in the experimental group could not correctly guess the meanings of new vocabulary items.

While Csábi (2004) and Boers (2000) conducted small-scale controlled experiments as one-session treatments, Condon (2008) explored the effect of cognitive linguistic motivations on learning phrasal verbs based on a rather large-scale experiment in which cognitive approach was integrated into a general EFL course. One hundred eleven first-year students in a Belgian university participated in the study and they were taught the cognitive linguistic motivations of the target particles (i.e., up, out, down, and in) based on Rudzka-Ostyn's (2003) analysis for eight weeks. The results showed that the experimental group outperformed the control group in terms of recollecting the taught phrasal verbs whereas there was no evidence of strategy transfer supporting Boers (2000) findings. Also, Condon (2008) contended that cognitive linguistic motivations are helpful only for certain types of phrasal verbs, which are rather literal than figurative.

Yasuda (2010) also examined the possibility of learning phrasal

verbs through conceptual metaphors in Japanese EFL context. To be more specific, he showed that enhancing awareness of orientational metaphors of particles can help learners acquire phrasal verbs. The participants were 115 Japanese university students and they were divided into two groups. The experimental group received the phrasal verbs categorized based on their orientatiaonl metaphors such as INTO, UP, DOWN, OUT and OFF while the control group was given a list of phrasal verbs without conceptual metaphors. After going over all the words, the students were to fill in the missing adverbial particles of phrasal verbs. These items included both learned and novel items in order to investigate the possibility of generalizing metaphorical concepts to unknown phrasal verbs. Their scores of the task were analyzed to check the effect of using conceptual metaphors.

The results of this experiment point to two strong conclusions when it comes to implementing cognitive linguistic approach to teach phrasal verbs. First, there was no significant difference between the two groups' performance on the learned phrasal verbs in the list, which were already likely to have been exposed to students before. It means that if the target items are already in the mental lexicon of the learners, the way of presenting vocabulary items in cognitive linguistic approach does not make any difference when compared to the traditional one. Second, when it comes to

unknown phrasal verbs, the experimental group outperformed the control group. This supports that when learners encounter unfamiliar phrasal verbs in the future, those who are aware of the orientational metaphor are likely to make use of the information of conceptual metaphors to guess the meaning of the novel items.

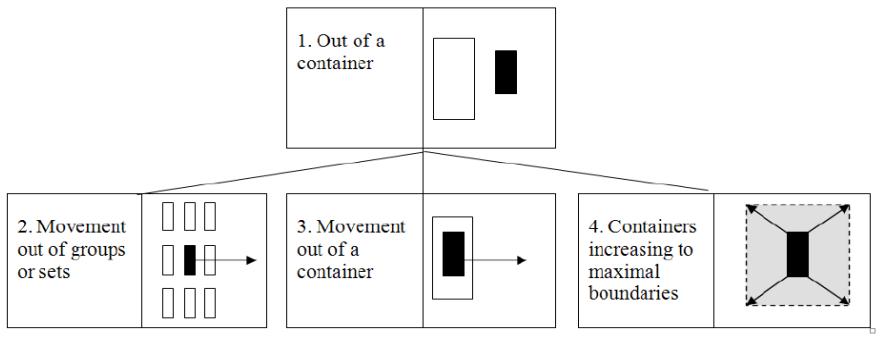
This experiment contributed to extending the scope of the cognitive linguistic approach to teaching vocabulary in two aspects. First, it was conducted in Japanese EFL setting. In other words, the difference between L1 and L2 might be larger than that of many previous studies and students are not likely to be exposed to input of the target language outside the classroom unlike other research mentioned above. Second, unlike Boer's third experiment (2000), the possibility of transfer of strategy to unfamiliar phrasal verbs has been investigated and it turned out to be successful. Metaphoric awareness can play an important role in vocabulary learning by making L2 learners capable of identifying conceptual metaphors and categorizing novel words under the correct metaphoric themes to guess the correct meaning, which could eventually lead to autonomous learning (Boers, 2000). However, the participants in this experiment were also limited to adults and this necessitates the research on younger learners' vocabulary learning based on conceptual metaphors.

### 2.3.3. Concept-Based Instruction in teaching phrasal verbs

While there have been some empirical studies looking at the effects of conceptual metaphors in learning phrasal verbs, there have been few studies on teaching phrasal verbs based on Gal'perin's CBI except for Lee's (2012) study. The crucial difference between previous cognitive linguistics-inspired instruction and Concept-Based Instruction is the existence of SCOBA, which is an orienting chart that contains core meanings or concepts in order for learners to understand the learning points. Not much attention to developing SCOBA for teaching phrasal verbs has been paid in language learning.

Lee's (2012) study confirms the effects of CBI on teaching phrasal verbs using SCOBA. Participants were international graduate students whose L1 is not English. Lee analyzed the metaphorical meanings of three particles: *out, up* and *over*. For example, CONTAINER metaphor was used to explain the meanings of *out* and SCOBA was developed as below in Figure 2.1.

**Figure 2.1 SCOBA for the particle *out* (taken from Lee, 2012).**




Through 6 weeks of 50-minute class sessions, learners were instructed to verbalize and internalize the core meanings of each particle by engaging in several activities including discussion, writing, and visualizing. The results demonstrate that CBI has a positive impact on understanding of semantics of particles in terms of both retrieving the learned items and transferring the strategy to new items.

Despite the effectiveness of CBI in Lee's (2012) study, there has been little attention to applying this approach to younger secondary school learners. The present study will adopt and modify SCOBAs developed by Lee (2012) in order to teach English phrasal verbs to Korean middle school students.

In conclusion, from limited literature on teaching phrasal verbs to

young EFL learners using cognitive linguistic approach, it appears necessary to explore the effects of cognitive linguistics-based instruction on learning phrasal verbs by Korean middle school students.

# CHAPTER 3.

# METHODOLOGY

This chapter describes the methodology employed in the present study. Section 3.1 discusses the participants. Section 3.2 describes the target forms selected for the study. Section 3.3 provides details on the test instrument and procedure. Finally, Section 3.4 presents data analysis.

## 3.1. Participants

The participants of the present study were 62 third graders in a public middle school in Seoul, Korea. They had studied English as a foreign language in middle school through regular English classes for three to four hours a week. Three intact classes were chosen and they were divided into three groups: concept-based instruction group (CBI-G), verbalization-based instruction group (VBI-G), and memorization-based instruction group (MBI-G). Their scores for the pre-test were analyzed through ANOVA in order to check their homogeneity.

The participating students in this study were grouped into three

proficiency levels on the basis of English test scores in the second semester of 2016 school year for exploring the third research question ("To what extent does learners' English proficiency level influence learning of phrasal verbs through instruction based on cognitive linguistic approach?"): the advanced level group with 90 points or above, the intermediate level group with 50 to 90 points, and the beginner level group with 50 points or lower, respectively. Table 3.1 presents the number of the participants in each instructional treatment group and grouping based on their English proficiency.

**Table 3.1 The Number of Participating Students by Instructional Treatment Group and Their English Proficiency**

| | | | |
|---|---|---|---|
| CBI-G | 19 | Advanced (Group H) | 4 |
| | | Intermediate (Group M) | 8 |
| | | Beginner (Group L) | 7 |
| VBI-G | 23 | Advanced (Group H) | 7 |
| | | Intermediate (Group M) | 8 |
| | | Beginner (Group L) | 8 |
| MBI-G | 20 | Advanced (Group H) | 4 |
| | | Intermediate (Group M) | 8 |
| | | Beginner (Group L) | 8 |

## 3.2. Target Form

The target form of the present study was phrasal verbs which consist of a verb and an adverbial particle (Rudzka-Ostyn, 2003). According to the study of Gardner and Davies (2007), the two most frequent adverbial particles in one of the largest native corpus, BNC (British National Corpus), were chosen: *up* and *out*. Based on Rudzka-Ostyn's analysis (2003) on meanings of particles *up* and *out*, different meanings of particles *up* and *out* were selected to be included in the instruction. The resulting list of 34 phrasal verbs selected for teaching are presented in Table 3.2.

**Table 3.2 List of Phrasal Verbs for Teaching**

| | | |
|---|---|---|
| senses of UP | position at a high place or moving up to a higher one | sit up / blow up / throw up |
| | aiming at or reaching a goal, an end, a limit | be up to / catch up |
| | moving to a higher degree, value or measure | look up to / live up to<br>stand up for |
| | higher up is more visible, accessible, known | make up / come up with<br>bring up / turn up |
| | covering an area completely/reaching the highest limit | eat up / end up / break up<br>burn up |
| senses of OUT | physical entities are containers | eat out/ cut out/ ask out/ drop out of |
| | bodies, minds, mouths are containers | hand out/ think out |
| | sets, groups are containers | count out |
| | existence/knowledge/visibility are containers | make out/ come out / break out / carry out / figure out |
| | non-existence/ignorance/invisibility are containers | run out / put out |
| | containers increasing to maximal boundaries | sit out / burn out |

## 3.3. Instrument and Procedure

The instruction was given to students during regular English classes in the fall semester of 2016. The instructional treatment for CBI-G and VBI-G was composed of four sessions including a pre-test and an immediate post-test. For both groups, a particle-focused practice was provided but only CBI-G was given a SCOBA of the target particles. Meanwhile, the instructional treatment for MBI-G consisted of two sessions including a pre-test and an immediate post-test. Each session for the three groups lasted for 45 minutes and a delayed post-test was conducted one week after the last session. In total, the tests and instruction sessions were conducted over two weeks for CBI-G and VBI-G. In contrast, the whole sessions lasted over a week for MBI-G. Table 3.3 summarizes the procedure of the study and the details on the procedures are explained in section 3.3.2.

**Table 3.3 The procedure of the instructional sessions**

| | session | Procedure | Time (minutes) |
|---|---|---|---|
| concept-based | 1st | pre-test | 20’ |
| | | presentation with SCOBA(particle UP) | 25’ |
| | 2nd | group activity (verbalization) | 20’ |
| | | individual activity (internalization) | 25’ |
| | 3rd | presentation with SCOBA(particle OUT) | 25’ |
| | | group activity (verbalization) | 20’ |
| | 4th | individual activity (internalization) | 25’ |
| | | immediate post-test | 20’ |
| | delayed post-test (after 1 week) | | 20’ |
| verbalization-based | 1st | pre-test | 20’ |
| | | presentation (particle UP) | 25’ |
| | 2nd | group activity (verbalization) | 45’ |
| | 3rd | presentation (particle OUT) | 25’ |
| | | group activity(1) (verbalization) | 20’ |
| | 4th | group activity(2) (verbalization) | 25’ |
| | | immediate post-test | 20 |
| | delayed post-test (after 1 week) | | 20’ |
| memorization-based | 1st | pre-test | 20’ |
| | | presentation (particle UP) & memorization | 25’ |
| | 2nd | presentation (particle OUT) & memorization | 25’ |
| | | immediate post-test | 20’ |
| | delayed post-test (after 1 week) | | 20’ |

### 3.3.1. Pre-test

A pre-test was composed of two types of tasks: English to Korean translation tasks and multiple-choice questions (See Appendix 1). In the English-Korean translation task, students were asked to translate 10 phrasal

verbs in a given context, containing the target particles *up* and *out*. Also, in 10 multiple-choice questions, the options included the same verb and each different particle in order to check the students' understanding of the target particles. Table 3.4 shows example questions from the pre-test.

**Table 3.4 Example Questions from Pre-test**

| | |
|---|---|
| English-Korean translation task | ★ Write down the meaning(s) of each underlined part.<br><br>1. Jane is very smart and nice, so all her friends look up to her.<br><br>2. I hope to come up with good ideas. |
| multiple-choice question | 1) He was so weak, he couldn't even _____.<br>a) sit b) sit up c) sit down d) sit out<br><br>2) I don't want to _____ with my girlfriend.<br>a) break b) break down c) break up d) break out |

## 3.3.2. Instructional Treatment

### *3.3.2.1. Concept-Based Instruction*

The instruction for CBI-G was based on Gal'perin's (1969, 1989, 1992) Concept-Based Instruction, proceeding in the order of materialization, verbalization and internalization stages. To be more specific, image schemata of various meanings of particles were provided and the meanings of the target phrasal verbs were given. Rudzka-Ostyn's (2003) SCOBA was

modified and simplified in order to adapt to the participants' cognitive level. More specifically, diagrams for explaining abstract meanings were replaced by concrete and intuitive pictures. Figure 3.1 and Figure 3.2 present the image schemata for each meaning of particle *up* and *out*, respectively. The target phrasal verbs were grouped depending on each sense of the target particle and presented to the participants in Korean translation (See Appendix 3 & 4).

**Figure 3.1 SCOBA for the particle *up* and each meaning (adapted from Rudzka-Ostyn, 2003).**

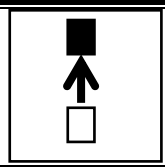
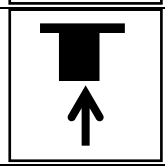
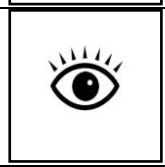
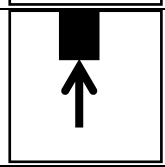
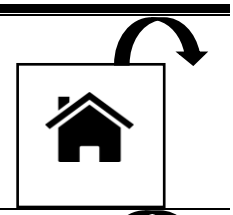
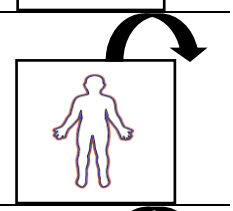
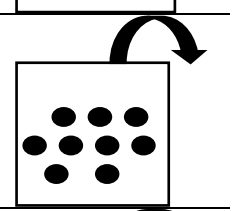
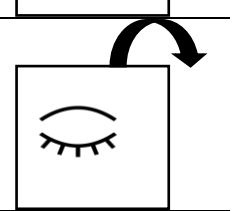
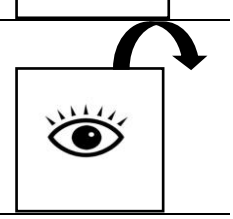
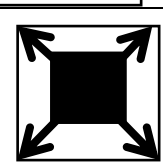
| | | |
|---|---|---|
| 1 | position at a high place or moving up to a higher one |  |
| 2 | aiming at or reaching a goal, an end, a limit |  |
| 3 | moving to a higher degree, value or measure |  |
| 4 | higher up is more visible, accessible, known |  |
| 5 | covering an area completely/reaching the highest limit |  |

**Figure 3.2 SCOBA for the particle *out* and each meaning (adapted from Rudzka-Ostyn, 2003).**

| | | | |
|---|---|---|---|
| 1 | Entities moving out of containers | Homes are containers |  |
| 2 | | Bodies, minds, mouths are containers |  |
| 3 | | Sets and groups are containers |  |
| 4 | | Non-existence/ignorance/invisibility are containers |  |
| 5 | | Existence/knowledge/visibility are containers |  |
| 6 | Containers increasing to maximal boundaries | |  |

Also, the participants were asked to complete a worksheet in the group activity so that they could verbalize what they had learned by discussing

with their group members. The tasks included comparing plain verbs with phrasal verbs by drawing pictures, filling in the blanks with the proper phrasal verbs, and matching phrasal verbs with the single-word verbs (See Appendix 5). Finally, the students were instructed to internalize the image schemata by reviewing SCOBA at the end of the class (See Appendix 6). Table 3.5 shows a sample task for internalization.

**Table 3.5 Sample Task for Internalization**

★ Think about the meaning(s) of each underlined part and identify which image each '*up*'evokes.

| sentence | image of *up* |
|---|---|
| The students should <u>sit up</u> straight when the teacher walked in. | |

### *3.3.2.2. Verbalization-Based Instruction*

The instruction for VBI-G was almost the same except the fact that SCOBA was not presented in VBI-G. In other words, students in VBI-G were presented with the meanings of the target phrasal verbs as a whole without the image schemata. However, they were asked to complete the same group worksheet as CBI-G did, which means they had opportunities to verbalize what they had learned with their group members. Besides, the

group activity was particle-focused by comparing plain verbs and phrasal verbs. In the VBI-G, the meanings of the particles were not explained explicitly, but they were presented implicitly.

#### *3.3.2.3. Memorization-based instruction*

The instruction for MBI-G consisted of presentation and memorization. The meanings of phrasal verbs as a whole were presented in Korean translation and the students were asked to memorize them for 10-15 minutes. The instruction was conducted for two sessions over one week.

### 3.3.3. Post-test

A post-test was almost the same as the pre-test except that 10 new phrasal verbs were included in order to see if the students would be able to transfer conceptual understanding of the particles (*up* and *out*) to unexposed phrasal verbs. In particular, the new phrasal verbs were composed of two types of combinations: new phrasal verbs with the learned particles (*up* and *out*), and phrasal verbs with the opposite particles of the exposed particles (*down* and *in*). Table 3.6 shows the list of the new phrasal verbs in post-test.

**Table 3.6 New Phrasal Verbs in Post-Test**

| Uninstructed Phrasal Verbs | |
|---|---|
| new verb + learned particles (up and out) | put up<br>fill up<br>cut up<br>sort out<br>find out |
| phrasal verbs with new particles (down and in) | count in<br>hand in<br>blow down<br>cut down<br>break in |

In the questions about known phrasal verbs, the participants were asked to write down the answers in the context where Korean translation and the verb were provided. Table 3.7 presents example questions about new phrasal verbs in the post-test. The immediate post-test was conducted right after the final session and the delayed-post test was conducted a week after the final session. In terms of scoring, for each correct answer in students' responses, one point was given, which was the same for the pre-test.

**Table 3.7 Example Questions about Unexposed Phrasal Verbs in Post-Test**

★ Fill in the blanks with a phrasal verb to match Korean translation using the given verb.

1. We should _____ the answer. (알아내다/find)
2. A: There's a party on Saturday.
   B: _____me_____. (~를 포함하다/count)

## 3.4. Data analysis

For the first research question, the results of learned items were analyzed through a repeated-measures ANOVA to see the difference among three groups by analyzing the scores of pre-test, immediate post-test, and delayed post-test. In particular, the test scores of the items explained in the instruction were compared to see if there was any difference in recollecting the learned items among the three groups.

Then, for the second research question, the test score for the novel items was compared through a one-way ANOVA to see if there was any difference in terms of transferring of the strategy using conceptual metaphors among three groups. This process was conducted for the immediate post-test and the delayed-post test.

Lastly, for the third research question, a one-way ANOVA was used for each proficiency group in the three instructional types in order to see if there is any difference in the effect of each type of instruction depending on learners' proficiency level.

The data collection and analysis were based on the methodology described in this chapter, and the following chapter describes the results and discussion of the present study.

# CHAPTER 4.

# RESULTS AND DISCCUSION

This chapter presents the quantitative results of the present study and discusses the findings. Section 4.1 and Section 4.2 discuss the effect of instructional methods on recollecting learned phrasal verbs and the possibility of transfer of conceptual understanding to new phrasal verbs depending on the instruction type, respectively. Section 4.3 provides test taker's performance depending on proficiency level and investigates the relation between instructional methods and proficiency level, and Section 4.4 summarizes the findings of the previous sections.

## 4.1. Effects of Instructional Methods on Recollecting Learned Phrasal Verbs

For the first research question ("To what extent does instruction based on cognitive linguistic approach help Korean middle school students to recall English phrasal verbs?"), a repeated-measures ANOVA was employed

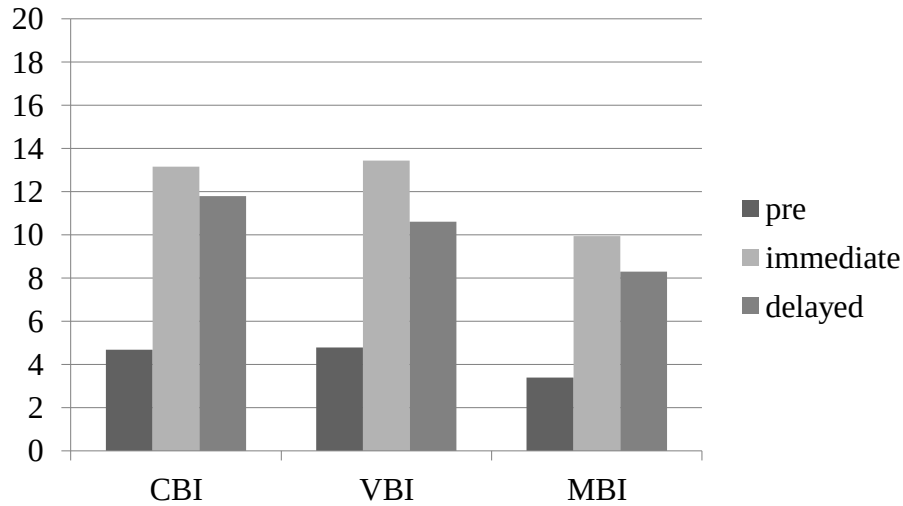
to explore the effect of instructional methods on the students' scores on recollecting learned phrasal verbs across the three times of tests. The independent variable was the instruction type (CBI, VBI, and MBI) and the dependent variable was the participants' scores on the instructed phrasal verbs.

Table 4.1 presents the number of participants, the mean scores and standard deviation in the pre-test, the immediate post-test, and the delayed post-test on instructed phrasal verbs. A one-way ANOVA showed no significant difference in pre-test scores among three groups. Therefore, it can be assumed that the three groups were homogenous regarding understanding of the target phrasal verbs at the beginning of the experiment. One point was given to each question and the total number of questions for learned items was 20.

**Table 4.1 Descriptive Statistics for Scores on Learned Phrasal Verbs**

| Instruction Type | N | | Mean | SD |
|---|---|---|---|---|
| CBI | 19 | pre-test | 4.7 | 2.47 |
| | | immediate post-test | 13.2 | 4.34 |
| | | delayed post-test | 11.8 | 5.34 |
| VBI | 23 | pre-test | 4.8 | 4.07 |
| | | immediate post-test | 13.4 | 6.43 |
| | | delayed post-test | 10.6 | 6.96 |
| MBI | 20 | pre-test | 3.4 | 2.46 |
| | | immediate post-test | 10.0 | 5.90 |
| | | delayed post-test | 8.3 | 6.42 |

**Figure 4.1 The Mean Scores of Learned Phrasal Verbs in the Pre-test, the Immediate and the Delayed Post-test**




As seen in Figure 4.1, the mean score of the three groups increased in the immediate post-test compared to the pre-test, and decreased in the delayed post-test compared to the immediate post-test. For example, the mean score of CBI-G in the pre-test was 4.7, and it increased to 13.2 in the immediate post-test. However, the mean score in the delayed post-test decreased to 11.8, when compared to the previous test. The other two groups' mean scores showed similar tendencies.

Table 4.2 presents a summary of the repeated-measures ANOVA, which was conducted on all mean scores to compare the instructional effects among three groups across the three tests. Since the sphericity was not

assumed, the corrected value (Greenhouse-Geisser) was employed. As shown in Table 4.2, there was a statistically significant result for the test sessions [F(1.522, 89.786) = 85.625, $p$ = .000]. According to Table 4.1, every group performed better after the instructional treatment. In particular, the increase in the mean score between the pre-test and the immediate post-test in CBI, VBI, and MBI was 8.5, 8.6 and 6.6, while the difference in mean scores between the pre-test and the delayed post-test in CBI, VBI, and MBI was 7.1, 5.8, and 4.9. Also, as the test session proceeded, the standard deviation became greater in all three groups: from 2.47 to 5.34 in CBI, from 4.07 to 6.96 in VBI, and from 2.46 to 6.42 in MBI. This implies that the difference between the students became larger in the delayed post-test compared to the pre-test. In contrast, there was no statistically significant results for the effect of instructional treatments, [F(2, 129.516) = 2.232, $p$ = .116]. This indicates that the mean scores of the three groups changed over time and it was statistically meaningful, but the difference among the three instructional treatments was not statistically significant.

**Table 4.2**
**A Repeated-Measures ANOVA of the Learned Phrasal Verbs**

| | Source | df | MS | F | Sig. |
|---|---|---|---|---|---|
| Within-Subjects | time | 1.522 | 1368.214 | 85.625** | .000 |
| | time*group | 3.044 | 14.141 | .885 | .453 |
| | Error (time) | 89.786 | 15.979 | | |
| Between-Subjects | Group | 2 | 129.516 | 2.232 | .116 |
| | Error | 59 | 58.035 | | |

To sum up, in terms of learned phrasal verbs, the three groups of different instruction types performed best in the immediate post-test, which was conducted right after the instruction. In the delayed post-test, the mean scores of all three groups decreased compared to the immediate post-test. The results show that the mean scores changed over time and the difference was statistically significant. However, the three types of instructions did not make any significant difference on performance related to learned items.

Yasuda's (2010) study had the similar results as there was no significant difference between the two instructional groups regarding recollecting learned items. However, Yasuda (2010) assumed that the learned phrasal verbs might be already in the participants' mental lexicon because they are likely to be familiar to the students in both instructional groups. It might lead to the results that did not show the effects of the instructions on learning phrasal verbs. Unlike Yasuda's (2010) study, the participants in the

present study were not likely to be exposed to the target phrasal verbs before the experiment, for they were only third graders in middle school and most of them did not have much experience of learning English from various learning sources other than textbook materials. The three groups' exceptionally low scores on the pre-test also show that their prior knowledge on phrasal verbs were quite limited. For this reason, the results of the present study cannot be explained in the way as Yasuda's (2010) was.

Meanwhile, the result of this study is not consistent with the earlier studies which showed the effects of cognitive linguistic approach on learning phrasal verbs (Boers, 2000; Csábi, 2004; Lee, 2012). The different results between the studies may be attributable to the readiness of the participants in terms of two aspects: linguistic and cognitive ability. Kurtyka (2001) stated the reasons for not using the materials based on cognitive linguistic approach in his experiment.

> The teachers themselves decided not to use the material with less advanced students because phrasal verbs belong to that part of the foreign language learner's vocabulary repertoire which he develops only after reaching a certain conceptual threshold: in terms of the language at his disposal (viz. the spectrum of idiomaticiy as represented by verbs and particles/prepositions)

and with regard to his intellectual readiness to do abstract thinking (cf. diagrams and image schemata). (Kurtyka, 2001, p. 47)

Not only are the students participating in this study younger and presumably at lower proficiency level than the participants in earlier studies (Boers, 2000; Condon, 2008; Kurtyka, 2001; Lee, 2012; Yasuda, 2010), but are also at lower proficiency level compared to average Korean students in the same grade. National Assessment of Educational Achievement (NAEA)[i)] diagnoses the academic ability of every third grader in middle school in Korea in three subjects, which are Korean, Math, and English, and classifies them into four levels: good, average, basic and deficient. While four percent of nationwide third graders in middle school were diagnosed as deficient in English at the 2016 administration of the NAEA, 20.4 percent of students in this school were categorized as deficient in English (Retrieved on September 2, 2017, from the World Wide Web: https://naea.kice.re.kr). In this respect, the participants' language ability may not have reached a level at or above which the cognitive linguistic approach would have influenced their learning

[i)] As the national educational policy focuses on establishment of 'the system to support improvement of basic academic ability' and school accountability system in recent years, the NAEA has been administered since 2008 for all the students in target grades. The purposes of NAEA has been extended to diagnosing and correcting the achievement level of individual students, and inspecting and supporting school education (Kim, S., Song, Kim, J. & Lee, 2011, p.72).

of phrasal verbs.

Moreover, the participants' ability in abstract thinking may not be enough for understanding conceptual metaphor, which also can be explained in terms of the simplicity of SCOBA. Condon (2008) revealed the necessity of reworking cognitive linguistic explanation in order to keep a balance between abstraction and precision appropriate for the target student population. The SCOBA used in the present study was adapted based on Rudzka-Ostyn's analysis (2003) in a simpler way. In other words, the schema for abstract meaning was replaced with a simple schema such as presenting an eye for *visibility or accessibility* when explaining the meaning of particle *up* so as not to overburden the participants with the complex diagrams and explanations (see Figure 3.1). However, the simplified version of SCOBA might have been too simplistic to deliver the core meanings of the target particles, which seemed to cause difficulties that students might experience in understanding them.

## 4.2. Effects of Instructional Methods on Understanding New Phrasal Verbs

In order to answer the second research question ("To what extent

does instruction based on cognitive linguistic approach help Korean middle school students to deduce the meaning of new English phrasal verbs?"), the mean scores of the new phrasal verbs in the two post-tests were analyzed. Table 4.3 presents the mean scores and standard deviations of the scores on new phrasal verbs obtained in the immediate and the delayed post-test.

**Table 4.3 Descriptive Statistics of Scores on New Phrasal Verbs**

| Instruction Type | N | | Mean | SD |
|---|---|---|---|---|
| CBI | 19 | immediate post-test | 2.6 | 1.89 |
| | | delayed post-test | 2.5 | 1.93 |
| VBI | 23 | immediate post-test | 2.4 | 2.15 |
| | | delayed post-test | 2.2 | 2.57 |
| MBI | 20 | immediate post-test | 0.9 | 1.33 |
| | | delayed post-test | 1.1 | 1.61 |

The number of questions on the new phrasal verbs was ten: five questions for new phrasal verbs with the learned particles (*up* and *out*), and five questions for phrasal verbs with their counterparts (*down* and *in*). Since one point was given to each question, the maximum score one could get was 10. As shown in Figure 4.2, the mean score of CBI-G in the immediate post-test was 2.6, while it decreased to 2.5 in the delayed post-test. This tendency appeared in the mean scores of VBI-G as well. However, for MBI-G, the mean score of the delayed post-test (=1.1) was slightly higher than that of the immediate post-test (=0.9).

**Figure 4.2 The Mean Scores of New Phrasal Verbs in the Immediate and the Delayed Post-test**

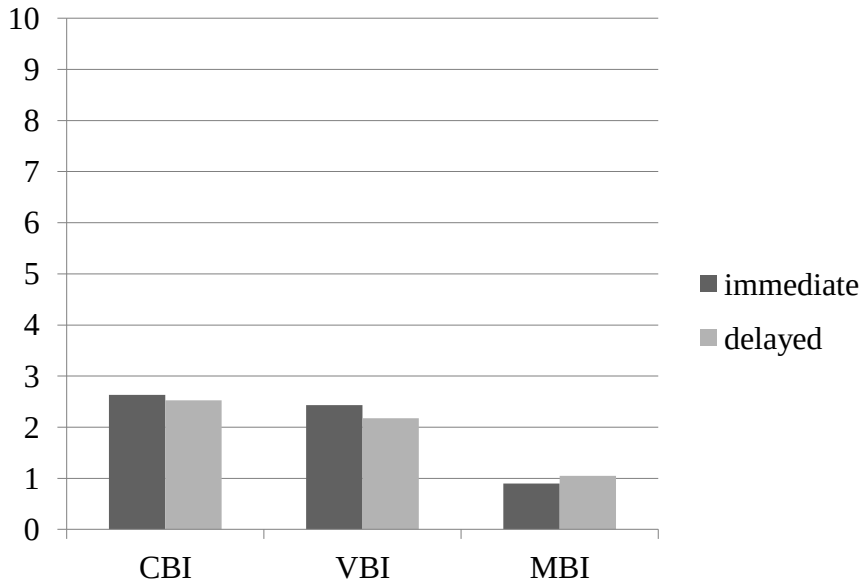



Table 4.4 shows a summary of the ANOVA for new phrasal verbs in the immediate post-test. The result indicates that the mean scores of the three groups on new phrasal verbs in the immediate post-test were statistically different [$F(2, 59) = 5.332$, $p = .007$]. As presented in Table 4.5, the post-hoc comparison (Tukey HSD) showed there was a significant difference in two pairs (CBI-G & MBI-G, VBI-G & MBI-G) and their p-values were .013 and .023, respectively. In particular, the mean score of MBI-G was much lower than that of CBI-G or VBI-G. The difference between MBI-G and CBI-G was 1.7 out of 10, and the difference between MBI-G and VBI-G was 1.5 out of 10.

**Table 4.4 Results of the ANOVA for New Phrasal Verbs (Immediate Post-test)**

| | SS | df | MS | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 36.127 | 2 | 18.063 | 5.332** | .007 |
| Within Groups | 199.873 | 59 | 3.388 | | |

**Table 4.5 Results of Post-hoc Comparison**

| | Group | Group | Mean Difference | Std. Error | Sig. |
|---|---|---|---|---|---|
| Tukey HSD | CBI-G | VBI-G | .19680 | .57060 | .937 |
| | | MBI-G | 1.73158* | .58965* | .013 |
| | VBI-G | MBI-G | 1.53478* | .56274* | .023 |

Table 4.6 presents the mean scores and standard deviations of each target particle pair (*up/down* and *out/in*). The number of questions on each pair was five, so the maximum score was five each. The mean score of CBI-G on the *up/down* pair was the highest (M=1.3 out of 5) whereas VBI-G gained the highest mean score for the *out/in* pair (M=1.7 out of 5). Also, the mean score on the *out/in* pair was higher than that on the *up/down* pair in all three groups.

**Table 4.6 Descriptive Statistics of Scores on Each Particle in Immediate Post-test**

| Instruction Type | N | | Mean | SD |
|---|---|---|---|---|
| CBI | 19 | up/down | 1.3 | 1.15 |
| | | out/in | 1.4 | 1.16 |
| VBI | 23 | up/down | 0.7 | 1.01 |
| | | out/in | 1.7 | 1.74 |
| MBI | 20 | up/down | 0.3 | .72 |
| | | out/in | 0.7 | .93 |

Table 4.7 shows a summary of the ANOVA for the *up/down* pair in the immediate post-test. The results show that the mean scores of the three groups on the *up/down* pair was statistically different [F(2, 59) = 5.281, *p* = .008]. The post-hoc comparison (Tukey HSD) demonstrated that there was a significant difference between CBI-G and MBI-G (*p* = .005).

**Table 4.7 Results of the ANOVA for *up/down* in the Immediate Post-test**

| | SS | df | MS | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 10.002 | 2 | 5.001 | 5.281** | .008 |
| Within Groups | 55.869 | 59 | .947 | | |

Table 4.8 shows a summary of the ANOVA for the *out/in* pair in the immediate post-test. As for the *up/down* pair, the results show that the mean scores of the three groups on the *out/in* pair were statistically different [F(2,

59) = 3.291, $p$ = .044]. The post-hoc comparison (Tukey HSD) indicated that there was a significant difference between VBI-G and MBI-G ($p$ = .037). By comparing the analyses on two pairs of particles, the difference between the mean scores of the *up/down* pair ($p < .01$) was found to be greater than that of the *out/in* pair ($p < .05$).

**Table 4.8 Results of the ANOVA for *out/in* in the Immediate Post-test**

| | SS | df | MS | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 12.030 | 2 | 6.015 | 3.291* | .044 |
| Within Groups | 107.841 | 59 | 1.828 | | |

Table 4.9 shows a summary of the ANOVA for new phrasal verbs in the delayed post-test. It indicates that there was no significant difference in the mean scores on new phrasal verbs in the delayed post-test among the three groups ($p$ = .078).

**Table 4.9 Results of the ANOVA for New Phrasal Verbs (Delayed Post-test)**

| | SS | df | MS | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 23.606 | 2 | 11.803 | 2.668 | .078 |
| Within Groups | 260.991 | 59 | 4.424 | | |

In short, when it comes to understanding new phrasal verbs, the two groups (CBI-G and VBI-G) performed better than MBI-G in both the immediate and the delayed post-test, but the difference in the mean scores among the three groups were statistically meaningful only in the immediate post-test. In spite of the possibility of the effects of cognitive linguistic approach on learning phrasal verbs, the unusually low scores even in the immediate post-test suggest that the phrasal verbs are too difficult for the target students to learn. The unsuccessful long-term retention is also attributable to the fact that the participants could not internalize the core meanings of the target particles due to the factors discussed in Section 4.1: the participants' lack of linguistic and cognitive ability for understanding the simplistic SCOBA.

However, the results of the immediate post-test were worth noting in that the three groups performed differently regarding the two different pairs of particles (*up/down* and *out/in*). To be more specific, the difference between the groups was greater in the *up/down* pair compared to the *out/in* pair. Condon's (2008) study had the similar results, in which cognitive linguistic approach was more helpful for learning literal phrasal verbs rather than figurative ones. In other words, depending on the clarity of the meanings of phrasal verbs, the performance of the participants could vary.

According to Rudzka-Ostyn (2003), the abstract meaning of the particle *out* is explained in terms of container metaphor. For instance, existence (e.g., *put out*) and non-existence (e.g., *make out*) are viewed as a container, and the meaning of particle *out* is "entities moving out of containers". Condon (2008) pointed out that this explanation lacks important factors, which are "the location of the viewer and the existential link between seeing and knowing". (p.152) However, the precise and detailed explanation could have overwhelmed students with a limited linguistic ability and this might lead to cognitive burden to learning, which is why the present study was based on Rudzka-Ostyn's (2003) analysis instead of adopting Condon's (2008) suggestion. Nevertheless, too much simplistic representation for explaining the core meanings of the target particles might have led to over-abstraction, which hindered the participants from understanding and applying cognitive linguistics-based explanation.

Compared to the abstraction in explanation of particle *out*, the core meanings of the particle *up* consist of relatively concrete elements, allowing the visual explanations to be more obvious and direct (See Figure 3.1). In this respect, easiness for explaining the core meanings of the particles by the SCOBA could have an impact on the performance of the participants with regard to the transfer of strategy to new phrasal verbs.

## 4.3. Test Taker's Performance and Proficiency Level

For the last research question ("To what extent does learners' English proficiency level influence learning of phrasal verbs through instruction based on cognitive linguistic approach?"), the participants in each instructional group were divided into three groups according to their scores of English subject in the second semester of 2016 school year as discussed in Section 3.1. The mean scores of Group H, Group M, and Group L in different instructional group were analyzed in terms of instructed phrasal verbs and uninstructed phrasal verbs.

### 4.3.1. Effects of Instructional Methods on Advanced Group's Performance

The number of students categorized as the high proficiency group in each CBI-G, VBI-G, and MBI-G is four, seven, and four, respectively. Table 4.10 shows the descriptive statistics for learned phrasal verbs. In every test, the mean score of CBI-G was higher than that of VBI-G, and the similar tendencies appeared between VBI-G and MBI-G.

**Table 4.10 Descriptive Statistics for Learned Phrasal Verbs (Group H)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 4 | pre-test | 8.0 | 1.15 |
| | | immediate | 19.0 | 0.81 |
| | | delayed | 19.0 | 2.00 |
| VBI-G | 7 | pre-test | 7.3 | 3.50 |
| | | immediate | 18.6 | 1.90 |
| | | delayed | 16.3 | 3.54 |
| MBI-G | 4 | pre-test | 6.5 | 1.91 |
| | | immediate | 11.0 | 4.70 |
| | | delayed | 7.5 | 5.44 |

Table 4.11 presents a summary of three one-way ANOVAs for each of the three test scores on learned phrasal verbs. The difference among the three groups was confirmed to be significant except for the pre-test [$F(2,12) = .306$, $p = .742$ for the pre-test, $F(2,12) = 11.745$, $p = .001$ for the immediate post-test, $F(2,12) = 10.165$, $p = .003$ for the delayed post-test]. The post-hoc comparison (Tukey HSD) of both immediate post-test and delayed post-test showed significant difference between CBI-G and MBI-G, and between VBI-G and MBI-G ($p < .01$ in all cases).

**Table 4.11 Results of ANOVA for Learned Phrasal Verbs (Group H)**

| PRE-TEST | | | | | |
|---|---|---|---|---|---|
| | SS | df | MS | F | Sig. |
| Between Groups | 4.050 | 2 | 2.252 | .306 | .742 |
| Within Groups | 88.429 | 16 | 7.369 | | |
| IMMEDIATE POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 1175.619 | 2 | 87.810 | 11.745** | .001 |
| Within Groups | 89.714 | 12 | 7.476 | | |
| DELAYED POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 298.905 | 2 | 149.452 | 10.165** | .003 |
| Within Groups | 176.429 | 12 | 14.702 | | |

Meanwhile, Table 4.12 presents the descriptive statistics for new phrasal verbs. In the immediate post-test, the mean scores of CBI-G and VBI-G were the same as 4 out of 10 while the mean score of MBI-G was lower than that of the other two groups, which was 1.8 out of 10. In the delayed post-test, VBI-G outperformed CBI-G while the mean score of MBI-G was the lowest, 1.5.

**Table 4.12 Descriptive Statistics for New Phrasal Verbs (Group H)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 4 | immediate post-test | 4.0 | 2.40 |
| | | delayed post-test | 4.0 | 2.16 |
| VBI-G | 7 | immediate post-test | 4.0 | 1.30 |
| | | delayed post-test | 4.3 | 2.36 |
| MBI-G | 4 | immediate post-test | 1.8 | 0.50 |
| | | delayed post-test | 1.5 | 1.30 |

In order to investigate the mean difference among the three groups, one-way ANOVA was conducted for each case. As shown in Table 4.13 [F(2, 12) = 3.331, $p$ = .071 for the immediate post-test, F(2, 12) = 2.438, $p$ = . 129 for the delayed post-test], there was no significant difference among the three groups in terms of understanding new phrasal verbs, which contrasts with the results on recollecting learned phrasal verbs.

**Table 4. 13 Results of ANOVA for New Phrasal Verbs (Group H)**

| IMMEDIATE POST-TEST (Uninstructed items) | | | | | |
|---|---|---|---|---|---|
| | SS | df | MS | F | Sig. |
| Between Groups | 14.85 | 2 | 7.425 | 3.331 | .071 |
| Within Groups | 26.75 | 12 | 2.229 | | |
| DELAYED POST-TEST (Uninstructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 21.305 | 2 | 10652 | 2.438 | .129 |
| Within Groups | 52.429 | 12 | 4.369 | | |

### 4.3.2. Effects of Instructional Methods on Intermediate Group's Performance

The number of students categorized as "intermediate" proficient in CBI-G, VBI-G, and MBI-G is eight in all cases. Table 4.14 shows the descriptive statistics of the three different instructional groups on learned phrasal verbs in the three tests. In the pre-test, the hierarchical order of the mean scores of the three instructional groups was as follows: VBI-G > CBI-G > MBI-G. In the immediate post-test, VBI-G outperformed the other two groups, and the mean score of MBI-G was higher than that of CBI-G. In the delayed post-test, the mean score of CBI-G outperformed the other two groups, and the mean scores of VBI-G and those of MBI-G were the same as 11.4 out of 20.

**Table 4.14 Descriptive Statistics for Learned Phrasal Verbs (Group M)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 8 | pre-test | 4.0 | 2.40 |
| | | Immediate | 12.5 | 4.00 |
| | | Delayed | 11.5 | 4.72 |
| VBI-G | 8 | pre-test | 5.3 | 4.56 |
| | | Immediate | 14.5 | 4.63 |
| | | Delayed | 11.4 | 6.89 |
| MBI-G | 8 | pre-test | 3.0 | 2.07 |
| | | Immediate | 13.1 | 5.80 |
| | | Delayed | 11.4 | 8.02 |

Table 4.15 summarizes the results of ANOVA of the three groups for learned phrasal verbs. The results summarized in Table 4.15 confirm that the mean scores of the three groups for learned phrasal verbs were not statistically different in all cases [$F(2, 21) = .991$, $p = .388$ for the pre-test, $F(2, 21) = .354$, $p = .706$ for the immediate post-test, $F(2, 21) = .001$, $p = .999$ for the delayed post-test]. This indicates that intermediate students did not show any significant difference among the three instruction types in terms of recollecting learned phrasal verbs.

**Table 4.15 Results of ANOVA for Learned Phrasal Verbs (Group M)**

| PRE-TEST | | | | | |
|---|---|---|---|---|---|
| | SS | df | MS | F | Sig. |
| Between Groups | 20.333 | 2 | 10.167 | .991 | .388 |
| Within Groups | 215.500 | 21 | 10.262 | | |
| IMMEDIATE POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 16.750 | 2 | 8.375 | .354 | .706 |
| Within Groups | 496.875 | 21 | 23.661 | | |
| DELAYED POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | .083 | 2 | .042 | .001 | .999 |
| Within Groups | 937.750 | 21 | 44.655 | | |

Table 4.16 presents means and standard deviations for the three groups' scores on new phrasal verbs. In the immediate post-test, students in CBI-G outperformed the other two groups and the mean score of VBI-G was higher than that of MBI-G. In the delayed post-test, CBI-G also outperformed the other two groups, who gained the highest mean score of 1.9 out of 10 points.

**Table 4.16 Descriptive Statistics for New Phrasal Verbs (Group M)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 8 | immediate post-test | 2.5 | 2.07 |
| | | delayed post-test | 1.9 | 1.64 |
| VBI-G | 8 | immediate post-test | 2.4 | 2.50 |
| | | delayed post-test | 1.8 | 2.76 |
| MBI-G | 8 | immediate post-test | 1.4 | 1.77 |
| | | delayed post-test | 1.8 | 2.12 |

In order to investigate the mean difference among the three groups, one-way ANOVA was conducted. As shown in Table 4.17 [$F(2, 21) = .667$, $p = .524$ for the immediate post-test, $F(2, 21) = .008$, $p = .992$ for the delayed post-test], there was no significant difference among the three groups in terms of understanding new phrasal verbs, indicating that the instructional methods did not make a significant difference on intermediate-level group's understanding of new phrasal verbs.

**Table 4. 17 Results of ANOVA for New Phrasal Verbs (Group M)**

| IMMEDIATE POST-TEST (Uninstructed items) | | | | | |
|---|---|---|---|---|---|
| | SS | Df | MS | F | Sig. |
| Between Groups | 6.083 | 2 | 3.042 | .667 | .524 |
| Within Groups | 95.750 | 21 | 4.560 | | |
| DELAYED POST-TEST (Uninstructed items) | | | | | |
| | SS | Df | MS | F | Sig. |
| Between Groups | .083 | 2 | .042 | .008 | .992 |
| Within Groups | 103.875 | 21 | 4.946 | | |

### 4.3.3. Effects of Instructional Methods on Beginner Group's Performance

The number of students categorized as low-proficiency level in each CBI-G, VBI-G, and MBI-G is seven, eight, and eight. Table 4.18 presents the mean scores and standard deviations of the three groups on learned phrasal verbs in the three tests. In the pre-test and the delayed post-test, CBI-G outperformed the other two groups and the mean score of MBI-G was higher than that of VBI-G in both tests. In the immediate post-test, the mean score of CBI-G was the highest while that of MBI-G was the lowest.

**Table 4.18 Descriptive Statistics for Learned Phrasal Verbs (Group L)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 7 | pre-test | 3.6 | 1.27 |
| | | immediate | 10.6 | 2.50 |
| | | delayed | 8.0 | 2.45 |
| VBI-G | 8 | pre-test | 2.1 | 2.47 |
| | | immediate | 7.9 | 6.51 |
| | | delayed | 4.9 | 4.85 |
| MBI-G | 8 | pre-test | 2.3 | 1.83 |
| | | immediate | 6.3 | 4.86 |
| | | delayed | 5.6 | 3.93 |

In order to check the difference among the three groups regarding the scores on learned phrasal verbs, one-way ANOVA was conducted and the results are summarized in Table 4.19. According to Table 4.19, in all cases, there was no significant difference among the three groups [$F(2,20) = 1.234$, $p = .312$ for the pre-test, $F(2,20) = 1.410$, $p = .267$ for the immediate post-test, $F(2,17) = 1.266$, $p = .304$ for the delayed post-test], suggesting that the instructional types did not make a significant difference on low-proficient students' remembering of learned phrasal verbs.

**Table 4.19 Results of ANOVA for Learned Phrasal Verbs (Group L)**

| PRE-TEST | | | | | |
|---|---|---|---|---|---|
| | SS | df | MS | F | Sig. |
| Between Groups | 9.389 | 2 | 4.694 | 1.234 | .312 |
| Within Groups | 76.089 | 20 | 3.804 | | |
| IMMEDIATE POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 70.519 | 2 | 36.260 | 1.410 | .267 |
| Within Groups | 500.089 | 20 | 25.004 | | |
| DELAYED POST-TEST (Instructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 39.076 | 2 | 19.538 | 1.266 | .304 |
| Within Groups | 308.750 | 20 | 15.438 | | |

Table 4.20 shows the descriptive statistics of the three groups for new phrasal verbs. In both tests, the hierarchical order of the mean scores of each Group L among the three instructional groups was as follows: CBI-G > VBI-G > MBI-G.

**Table 4.20 Descriptive Statistics for New Phrasal Verbs (Group L)**

| Group | N | | Mean | SD |
|---|---|---|---|---|
| CBI-G | 7 | immediate post-test | 2.0 | 1.15 |
| | | delayed post-test | 2.4 | 1.90 |
| VBI-G | 8 | immediate post-test | 1.1 | 1.55 |
| | | delayed post-test | 0.7 | 1.16 |
| MBI-G | 8 | immediate post-test | 0.0 | 0.00 |
| | | delayed post-test | 0.1 | 0.35 |

The result of one-way ANOVA, as summarized in Table 4.21, presents that the difference among the three groups was significant in both tests [F (2, 20) = 6.080, $p$ = .009 for the immediate post-test, F(2, 20) = 6.503, $p$ = .007 for the delayed post-test]. The post-hoc comparison (Tukey HSD) of the immediate post-test confirmed that the difference between CBI-G and MBI-G was significant ($p < .01$) while that of the delayed post-test showed that there was a significant difference in two pairs (CBI-G & VBI-G, CBI-G & MBI-G) and their p-values were .047 and .006, respectively. It indicates that different instructional types made a significant difference on low-proficient students' understanding of new phrasal verbs.

**Table 4. 21 Results of ANOVA for New Phrasal Verbs (Group L)**

| IMMEDIATE POST-TEST (Uninstructed items) | | | | | |
|---|---|---|---|---|---|
| | SS | df | MS | F | Sig. |
| Between Groups | 15.125 | 2 | 7.563 | 6.080** | .009 |
| Within Groups | 24.875 | 20 | 1.244 | | |
| DELAYED POST-TEST (Uninstructed items) | | | | | |
| | SS | df | MS | F | Sig. |
| Between Groups | 20.867 | 2 | 10.434 | 6.503** | .007 |
| Within Groups | 32.089 | 20 | 1.604 | | |

In sum, in order to explore the third research question ("To what extent does learners' English proficiency level influence learning of phrasal verbs through instruction based on cognitive linguistic approach?"), the participants in each instructional group were divided into three groups according to their scores of English subject, and the results varied depending on their proficiency level.

For the advanced group, Group H, there was a significant difference between the three different instructional groups regarding learned phrasal verbs. In particular, students in CBI-G and VBI-G outperformed those in MBI-G in both the immediate post-test and the delayed post-test. This is inconsistent with the result of the first research question which showed that the types of instructions did not make any significant difference on the test takers' performance. The different results on advanced learners' performance might suggest that students with a relatively high level of proficiency could benefit from the instruction based on cognitive linguistic approach when recollecting the meanings of learned phrasal verbs. However, the use of SCOBA did not have an influence on remembering phrasal verbs. In addition, there was no significant difference between the three instructional methods with respect to new phrasal verbs. It implies that the cognitive linguistic approach might not have a positive effect on deducing meanings of unknown

phrasal verbs by advanced learners.

Unlike the advanced group, there was no significant difference between the performance of intermediate group, Group M, in each different instructional treatment group on both learned and unknown phrasal verbs. On the other hand, beginner group, Group L, did not show any significant difference between the instruction types on learned phrasal verbs whereas there was a significant difference between the instructional treatments on understanding of the new phrasal verbs. In particular, the performance of low-proficient students in CBI-G outperformed that of MBI-G in the immediate post-test and students in CBI-G outperformed the other two groups in the delayed post-test. It suggests that learners with a relatively low level of proficiency might have also been positively influenced by the instruction based on cognitive linguistic approach when it comes to deducing the meanings of unfamiliar phrasal verbs.

The results on the effects of cognitive linguistics-inspired instruction on learning phrasal verbs according to proficiency level provide the following two practical implications. First, teaching phrasal verbs based on cognitive linguistic approach could be helpful for the Korean learners of English in middle school with a relatively high level of proficiency when recollecting learned phrasal verbs. As Kurtyka (2001) noted, learning phrasal verbs based

on cognitive linguistic approach may require a certain level of linguistic ability. This might be the reason why there is a significant difference among the three different instructional groups in recollecting instructed items for the advanced-level students only, whereas there is no statistically significant difference between the three instructional groups in which different proficiency groups are mixed as discussed in Section 4.1. Second, the finding that low-level students performed better in CBI-G than in the other two groups in deducing meanings of uninstructed phrasal verbs also shows the possibility of implementing the instruction based on cognitive linguistic approach. The increase in the delayed post-test score of low-level students in CBI-G suggests that this is not merely a novelty effect. It is not likely that Group L in CBI-G fully understood the conceptual explanations of the target particles based on the SCOBA considering their scores were less than three out of 10. Nevertheless, the way of teaching the core meanings of the target particles seems to have motivated low-proficient students to learn by attracting their attention to the target particles. Even a little interest in learning could have made a big difference in the results because most of the students with low-proficiency level might have paid little attention to studying English. In this respect, the instruction based on cognitive linguistic approach could be also successful for teaching phrasal verbs even when learners' proficiency

level is not high enough. However, as discussed in Section 4.2, development of the clear SCOBA would be necessary and the literal meanings of particles should be presented to the learners before the abstract or figurative ones in order to enhance their conceptual understanding without overwhelming them.

# CHAPTER 5.

# CONCLUSION

This chapter consists of three sections. Section 5.1 summarizes the major findings of the present study. In Section 5.2, the implications are presented on the possibility of incorporating instruction based on cognitive linguistic approach in the Korean EFL context. Finally, Section 5.3 reports the limitations of the present study and makes suggestions for further research.

## 5.1. Major Findings

This study explored the effect of instruction based on cognitive linguistic approach on learning phrasal verbs in two aspects: recollecting learned items and deducing the meanings of new items. Also, the effects of the instructions were investigated depending on the proficiency level of the participants.

Regarding the first research question, the results showed that the instruction methods did not have an effect on remembering the learned phrasal verbs in terms of long-term retention. Although their scores varied

across time, as their scores reached the highest right after any instruction and decreased one week after the last instruction, the tendencies between the three instruction groups did not show any significant difference. However, it does not mean that the instruction based on cognitive linguistic approach is not helpful for learning phrasal verbs. Rather, the participants were not ready enough to understand and internalize the concepts of the target particles given to them considering their linguistic ability or cognitive ability for abstract thinking. Also, the visual representation, called SCOBA, employed in the experiment might have been too simplistic and abstract to deliver the core meanings of the target particles.

As for the second research question, the results were consistent with the first research question when it comes to the unsuccessful transfer of the conceptual understanding to new phrasal verbs in the long term. However, an interesting point was found in the immediate post-test, which showed the significant difference between the groups. The clearer the target particle's meanings were, the better the participants who were taught based on cognitive linguistic approach tended to guess the meanings of the new phrasal verbs. This also indicates the possibility of applying cognitive linguistic approach into EFL context.

Lastly, for the third research question, instructions based on cognitive

linguistic approach have a different impact on learners according to their proficiency level. In particular, both advanced group and beginner group benefitted from cognitive linguistic approach in terms of recollecting learned phrasal verbs and deducing meanings of unfamiliar ones, respectively. It suggests that the conceptual explanations of English phrasal verbs could be teachable to middle school students in Korean EFL context.

## 5.2. Implications

There are some pedagogical implications for teaching phrasal verbs to Korean learners of English in EFL context. Although the present study showed some mixed results for the effect of cognitive linguistics-based approach to teaching phrasal verbs, it is still applicable in the Korean EFL context. However, when incorporating this way of teaching into the regular classes, teachers should take several things into account.

Considering the readiness of the target students, teachers should modify the materials based on cognitive linguistic approach. As discussed in the present study, the presentation of the core concepts of the target language unit is the key to Concept-Based Instruction. However, if the learners' linguistic and cognitive ability is not high enough for understanding the

concepts presented in diagrams or schemata, the method may not be as effective as expected. In order to ensure that they can understand and internalize the key concepts of the target language units, teachers should modify the materials appropriately to the target students.

In this line of thought, precise analysis on reworking SCOBA is also necessary. Even though both Lee (2012) and Kurtyka (2001) employed Rudzka-Ostyn's (2003) analysis in their studies and they yielded the successful results of cognitive linguistic approach, their target learners were all adults with high-intermediate proficiency, which means Rudzka-Ostyn's analysis might be too difficult for the Korean EFL middle school students to understand and internalize. Also, learners tend to easily understand clear meanings of the particles because they are more available than abstract ones (Kurtyka, 2001; Yasuda, 2010). As discussed in Section 4.2, the present study also showed that the participants performed better on the particle which is clear and easy to explain with the visual explanations. In order to extend the core concepts to more abstract one, SCOBA for building the link between literal meanings and figurative meanings is needed. Besides, for the successful use of SCOBA, not only the researchers but also the teachers, who actually know the level of their students through informal assessment in the classroom, should work on developing adequate and specific SCOBA for the

target students.

Furthermore, as discussed in Section 4.3, if the students have high level of proficiency even in the middle school, the teachers should try instruction based on cognitive linguistic approach to teach phrasal verbs as an alternative to having them memorize the list of the target items. This way of teaching would be helpful for them in terms of long-term retention.

Also, even if the students' level of proficiency is relatively low, the teachers might want to implement cognitive linguistic approach by attracting their attention to the visual representations, SCOBA. Even beginner level of students would be able to guess the meanings of unfamiliar phrasal verbs by correctly using their conceptual understanding with the help of SCOBA because cognitive linguistic approach to teaching seems to be interesting enough for them to pay attention to learning. However, considering language ability at their disposal, teaching materials should not include too much information and present the concepts as clearly as possible.

## 5.3. Limitations and Suggestions

The present study explored the effect of instruction based on cognitive linguistic approach on the Korean EFL middle school students of

learning phrasal verbs. However, there are some limitations in this study, which could be improved in the future research.

The most obvious limitation in this research is the lack of analysis on developing SCOBA for the target learners. As discussed in Section 4.1, the simplified version of the SCOBA could have led to over-abstraction. Presenting simplistic schema for the core concepts of the target particles might not have yielded the accurate results in order to see the effects of instruction. By developing SCOBA for young EFL learners to explain the particles, this could be improved in the future research.

Another limitation of this study is the duration of the experiment and the number of the participants. Although the meanings of the target particles needed enough time to understand and internalize, the experiment was conducted for about two weeks due to the practical reasons. Moreover, the number of participants was not very large, particularly when the participants were grouped into different instructional types and proficiency level. These limitations can be improved in the future research by extending the scale of the experiment in terms of the duration and the number of participants.

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# APPENDIX 1
# Pre-test

1. 다음 문장에서 밑줄 친 단어의 뜻을 쓰세요.

| | | |
|---|---|---|
| 1 | Jane is very smart and nice, so all her friends look up to her. | |
| 2 | The movie didn't live up to my expectations.<br>*expectation: 기대 | |
| 3 | I hope to come up with good ideas. | |
| 4 | The car is going to blow up when it hits the wall.<br>* hit: 부딪히다 / wall: 벽 | |
| 5 | A: What are we doing next? B: It is up to you. | |
| 6 | The teacher handed out the exam papers.<br>*exam papers: 시험지 | |
| 7 | The Korean War broke out in 1950.<br>* Korean War: 한국전쟁 | |
| 8 | I am running out of time. | |
| 9 | I can't figure out how to use this computer. | |
| 10 | They want to throw out most of their old clothes. | |

2. 다음 밑줄 친 곳에 들어갈 적절한 단어를 a)~d) 중 고르세요.

1) He was so weak, he couldn't even _____. 답) _____

a) sit b) sit up c) sit down d) sit out

2) I don't want to _____ with my girlfriend. 답) _____

a) break b) break down c) break up d) break out

3) My friend has digestive problems and _____ all the time. 답) _____
* digestive problems: 소화장애

a) throws out b) throws in c) throws d) throws up

4) I don't feel like eating at home. Let's_____. 답) _____
* feel like ~ing: ~하고 싶다

a) eat b) eat in c) eat out d) eat up

5) He is a liar and will be trying to _____ an excuse again.
* excuse: 변명 답) _____

a) make up b) make out c) make in d) make down

6) I couldn't _____ what he was saying. 답) _____

a) make out b) make c) make in d) make up

7) I waited for an hour, but he didn't _____. 답) _____

a) turn down b) turn up c) turn d) turn out

8) Teenagers like to _____ articles about their idols. 답) _____
* teenagers: 10대 청소년들, article: 기사, idol: 아이돌

a) cut up b) cut in c) cut out d) cut down

9) I'm too tired from studying. I would _____. 답) _____

a) burn b) burn in c) burn up d) burn out

10) You have to _____ this task. 답) _____
*task: 과업, 과제

a) carry out b) carry in c) carry d) carry up

# APPENDIX 2
# Post-test

1. 다음 문장에서 밑줄 친 단어의 뜻을 쓰세요.

| | | |
|---|---|---|
| 1 | Jane is very smart and nice, so all her friends look up to her. | |
| 2 | The movie didn't live up to my expectations.<br>*expectation: 기대 | |
| 3 | I hope to come up with good ideas. | |
| 4 | The car is going to blow up when it hits the wall.<br>* hit: 부딪히다 / wall: 벽 | |
| 5 | A: What are we doing next? B: It is up to you. | |
| 6 | The teacher handed out the exam papers.<br>*exam papers: 시험지 | |
| 7 | The Korean War broke out in 1950.<br>* Korean War: 한국전쟁 | |
| 8 | I am running out of time. | |
| 9 | I can't figure out how to use this computer. | |
| 10 | They want to throw out most of their old clothes. | |

2. 다음 밑줄 친 곳에 들어갈 적절한 단어를 a)~d) 중 고르세요.

1) He was so weak, he couldn't even _____. 답) _____

a) sit b) sit up c) sit down d) sit out

2) I don't want to _____ with my girlfriend. 답) _____

a) break b) break down c) break up d) break out

3) My friend has digestive problems and _____ all the time. 답) _____
* digestive problems: 소화장애

a) throws out b) throws in c) throws d) throws up

4) I don't feel like eating at home. Let's_____. 답) _____
* feel like ~ing: ~하고 싶다

a) eat b) eat in c) eat out d) eat up

5) He is a liar and will be trying to _____ an excuse again.
* excuse: 변명 답) _____

a) make up b) make out c) make in d) make down

6) I couldn't _____ what he was saying. 답) _____

a) make out b) make c) make in d) make up

7) I waited for an hour, but he didn't _____. 답) _____

a) turn down b) turn up c) turn d) turn out

8) Teenagers like to _____ articles about their idols. 답) _____
* teenagers: 10대 청소년들, article: 기사, idol: 아이돌

a) cut up b) cut in c) cut out d) cut down

9) I'm too tired from studying. I would _____. 답) _____

a) burn down b) burn in c) burn up d) burn out

10) You have to _____ this task. 답) _____
*task: 과업, 과제

a) carry out b) carry in c) carry d) carry up

**3. 제시된 뜻과 단어를 활용하여 아래 (예시)와 같이 빈칸에 들어갈 알맞은 단어를 쓰세요.**

(예시) It is difficult to _____the baby all day. (돌보다/look) 답: look after

1) Where shall we _____ the tent? (설치하다/put) 답: _____

2) We should _____ the answer. (알아내다/find) 답: _____

3) _____ the kettle with the water. (가득 채우다/fill) 답: _____

4) _____ the meat! (잘게 자르다/cut) 답: _____

5) Could you _____the toys that can be thrown away? (구별해내다/sort)

* throw away: 버리다 답: _____

6) A: There's a party on Saturday. B: _____me_____. (~를 포함하다/count)

답: _____

7) _____ your worksheet, when you're finished. (제출하다/hand)

답: _____

8) A strong wind can _____ big trees. (불어 넘어뜨리다/blow)

답: _____

9) My mother has to _____ her working hours. (줄이다/cut)

*working hours: 근무 시간 답: _____

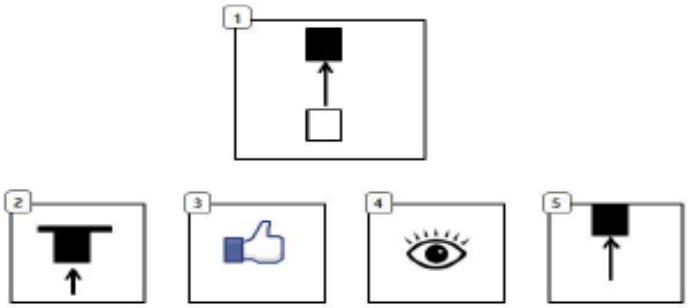
10) They are going to _____ through the window. (침입하다/break)

답: _____

# APPENDIX 3
# SCOBA for CBI-G (particle *up*)

SCOBA_UP
3학년 _____반 _____번

★ UP이 가지는 뜻입니다. 빈 칸에 알맞은 뜻을 써봅시다. ★




▶ 1번 그림에서 연상되는 뜻: _____

1. sit UP: _____
2. blow UP: _____
3. throw UP: _____

▶ 2번 그림에서 연상되는 뜻: _____

4. be UP to: _____
5. catch UP: _____

▶ 3번 그림에서 연상되는 뜻: _____

6. look UP to: _____
7. live UP to: _____
8. stand UP for: _____

▶ 4번 그림에서 연상되는 뜻: _____

9. make UP (a story): _____
10. come UP with (an idea): _____
11. bring UP (the issue): _____
12. turn UP(=show up): _____

▶ 5번 그림에서 연상되는 뜻: _____

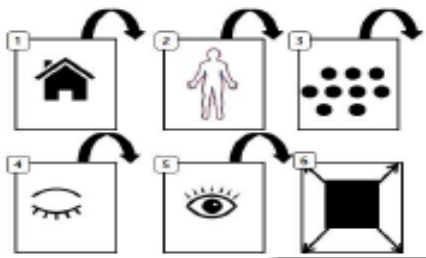
13. eat UP: _____
14. end UP: _____
15. break UP: _____
16. burn UP: _____

# APPENDIX 4
# SCOBA for CBI-G (particle *out*)

SCOBA_OUT

3학년 _____반 _____번

★ OUT이 가지는 뜻입니다. 빈 칸에 알맞은 뜻을 써봅시다. ★




▶ 1번 그림에서 연상되는 뜻: _____쪽으로

1. eat OUT: _____ 상자? _____
2. cut OUT: _____ 상자? _____
3. throw OUT: _____ 상자? _____
4. ask OUT: _____ 상자? _____
5. drop OUT of (school): _____ 상자? _____

▶ 2번 그림에서 연상되는 뜻: _____밖으로

6. hand OUT: _____ 상자? _____
7. think OUT: _____ 상자? _____

▶ 3번 그림에서 연상되는 뜻: _____밖으로

8. count OUT: _____
*Count me out, I'm afraid; I won't be able to come to your party.*

▶ 4번 그림에서 연상되는 뜻: _____밖으로

9. make OUT: _____
10. come OUT: _____
11. break OUT: _____
12. carry OUT: _____
13. figure OUT: _____

▶ 5번 그림에서 연상되는 뜻: _____밖으로

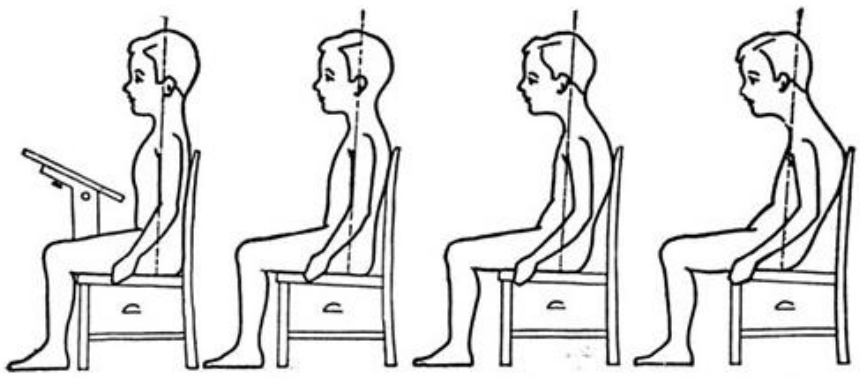
14. run OUT of: _____
15. put OUT: _____

▶ 6번 그림에서 연상되는 뜻: _____

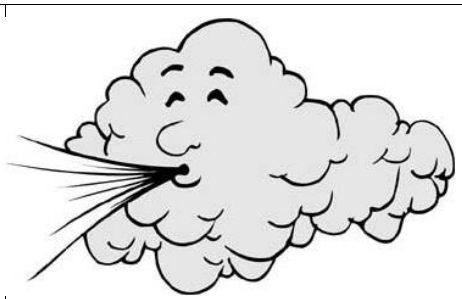
16. sit OUT: _____
17. burn OUT: _____

# APPENDIX 5
# Group Activity for CBI-G & VBI-G

1. 다음 자세 중 어떤 그림이 동사 "sit up"과 어울릴까요? 답: _____




2. 다음 그림을 보며 아래 문장을 완성해 봅시다.

| | |
|---|---|
|  |  |
| We can't cross the river because the bridge has _____. (blow) | A cold wind is _____ from the east. (blow) |

3. throw 와 throw up 의 의미차이를 생각하면서 떠오르는 그림을 그려봅시다.

| throw | throw up |
| --- | --- |
| | |

4. eat 과 eat up 의 의미차이를 생각하면서 떠오르는 그림을 그려봅시다.

| eat | eat up |
| --- | --- |
| | |

5. break 과 break up 의 의미차이를 생각하면서 떠오르는 그림을 그려봅시다.

| break | break up |
| --- | --- |
| | |

6. burn 과 burn up 의 의미차이를 생각하면서 떠오르는 그림을 그려봅시다.

| burn | burn up |
| --- | --- |
| | |

7. 다음 문장을 밑줄 친 부분에 주의하며 해석해 보세요.

| | |
|---|---|
| It is up to you to decide where to go. | |

8. 다음 문장에서 들어갈 알맞은 동사를 골라 적어보세요.

| |
|---|
| ended up / catch up / turned up / made up / coming up with |

1) If you don't review this class, it is really hard to _____.

2) He _____ some excuses about the dog eating his homework.

3) Your friend has a talent for _____ good ideas.

4) Do you know how many people _____ at the party last night?

5) They all _____ at my house.

9. 다음 밑줄 친 동사와 같은 뜻을 가지는 동사를 골라 적어보세요.

| |
|---|
| respect defend mention satisfy |

1) Don't be afraid to stand up for your rights.

2) She looks up to her father.

3) I am sorry to bring up the subject of politics again.

4) Her novel has really lived up to our expectation.

다음 단어의 뜻이 어떻게 다른지 다시 한 번 써보도록 합시다.

| | | | | |
|---|---|---|---|---|
| 1 | sit up | | sit | |
| 2 | blow up | | blow | |
| 3 | throw up | | throw | |
| 4 | be up to | | be | |
| 5 | catch up | | catch | |
| 6 | look up to | | look | |
| 7 | live up to | | live | |
| 8 | stand up for | | stand | |
| 9 | make up | | make | |
| 10 | come up with | | come | |
| 11 | bring up | | bring | |
| 12 | turn up | | turn | |
| 13 | eat up | | eat | |
| 14 | end up | | end | |
| 15 | break up | | break | |
| 16 | burn up | | burn | |

# APPENDIX 6
# Individual Activity for CBI-G

**다음 문장에서 밑줄 친 부분의 의미를 적어보고, 전 시간에 배운 UP의 의미와 연결시켜서 떠오르는 그림을 그려보세요.**

| | 문장 | 떠오르는 그림 |
|---|---|---|
| 1 | The students should sit up straight when the teacher walked in. | |
| 2 | We can't cross the river because the bridge has been blown up. | |
| 3 | Did you throw up again? Take this medicine. | |
| 4 | It is up to you to decide what to do next. | |
| 5 | He hurried to catch up with the others. | |
| 6 | She looks up to her father. | |
| 7 | Her latest novel has really lived up to our expectation.<br>*latest: **최신의**, expectation: **기대** | |
| 8 | Don't be afraid to stand up for your rights. | |
| 9 | He must have made up the story from beginning to end. | |
| 10 | Your friend has a talent for coming up with good ideas. | |
| 11 | I am sorry to bring up the subject of politics again. | |
| 12 | Do you know how many people turned up at the party last night? | |
| 13 | Who has eaten up the cake? | |
| 14 | I never thought I would finally end up in Japan. | |
| 15 | The long drunken party had just broken up. | |
| 16 | He has burnt up all the papers in the garden. | |

# 국 문 초 록

본 연구는 인지언어학적 관점 기반 교수법이 한국 영어 학습자들의 구동사 학습에 미치는 영향을 분석하고자 하였다. 한국의 중학교 3학년 학생 62명을 대상으로 본 연구는 진행되었으며, 구동사를 가르치는 방식에 따라 개념 중심 교수법 집단(concept-based instruction group), 언어화 중심 교수법 집단(verbalization-based instruction), 암기 중심 교수법 집단(memorization-based instruction)으로 나누어졌다. 개념 중심 교수법과 언어화 중심 교수법 집단은 가르치고자 하는 요소의 핵심적인 개념을 강조하는 인지언어학적 관점을 따르고 있으며, 유일한 차이는 그 개념을 도식화하여 제시하는 SCOBA(Schema of Complete Orienting Basis of an Action)의 존재여부이다. 즉, 개념 중심 교수법은 SCOBA를 활용하여 목표 구동사 안의 첨사(particle)의 핵심개념을 제시하였으나 언어화 중심 교수법 집단은 SCOBA 제시 없이 집단 활동을 통하여 첨사의 핵심 개념을 언어화함으로써 연습하게 하였다. 마지막으로 암기 중심 교수법 집단은 암기를 통해 목표 구동사를 학습하게 하였다. 사전, 인접 사후 및 지연 사후 검사를 통해 세 가지 교수 방법이 구동사 학습에 미치는 영향을 분석하였다.

분석 결과, 배운 동사에 대한 파지 효과는 교수방식에 따라서 통계적으로 유의하지 않았다. 또한, 새로운 동사에 대한 의미 유추에 대해서는 지연 사후 검사에서는 유의하지 않았으나, 인접 사후 검사에서는 세 집단 간의 유의한 차이가 있었으며 인지언어학적 관점 기반 교수법 집단의 점수가 암기 중심 교수법 집단 보다 높았다. 특히 첨사의 종류에 따라서 다른 유의도를 보였다. 마지막으로 학습자의 영어 능숙도에 따라서 세 가지 교수법의 효과는 다른 방식으로 영향을 미쳤다. 능숙도가 높은 학습자는 인지언어학점 관점 기반으로 학습한 경우, 배운 동사에 대해서 다른 집단에 비해 통계적으로 유의하게 점수가 높았다. 능숙도가 중간인 학습자는 배운 동사와 새로운 동사 모두 집단 간 유의한 차이는 없었다. 능숙도가 낮은 학습자는 인지언어학적 관점 기반으로 학습한 경우, 새로운 동사에 대해 다른 집단에 비해 통계적으로 유의하게 높은 점수를 보였다.

이러한 결과는 인지언어학적 관점에 기반한 교수법이 한국 중학교 학습자들에게 적용될 가능성을 보여준다. 즉, 새로운 구동사에 대한 의미 유추와 관련하여 인접 사후 검사에서 인지언어학적 관점에 기반한 교수법이 단순 암기 기반 교수법보다 효과가 있었으며, 개념적 이해를 근간으로 한 교수법이 능숙도가 높은 학습자의 학습한 구동사에 대한 기억력을 높이고, 능숙도가 낮은 학습자는 새로운 구동사의 의미를

유추하는 데 효과가 있었다는 점에서 그것의 효과성을 입증해주는 것이다.

다만, 성공적인 인지언어학적 관점에 기반한 교수법 활용을 위해서 학습자의 언어적 그리고 인지적 능력이 고려되어야 할 것이며, SCOBA와 같은 학습자료 개발에 실제로 학생을 대상으로 수업을 실시하는 교사의 참여가 필수적이라고 할 수 있을 것이다.

주요어: 인지언어학적 접근, 구동사, 한국인 영어 학습자, SCOBA, 언어적/인지적 능력

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